

### United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street Building 201 Richmond, CA 94804

Date: 9/15/2017

Subject: Analytical Testing Results - Project R17E01

SDG: 17243B

From: Peter Husby, Director

**EPA Region 9 Laboratory** 

EMD-3-1

To: Janice Chan

**Enforcement Division, Air Section** 

ENF-2-1

Attached are the results from the analysis of samples from the **Catalytic Converter Analysis FY2017** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Peter Husby, the Lab Project Manager at (510)412-2300.

Electronic CC: Matt Salazar, ENF-2-1

Andrew Zelling, Nathan Dancher, ENF-2-1 Elfego Felix, Kingsley Adeduro, ENF-2-1

#### Analyses included in this report:

Platinum Group Metals by XRF



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Project Manager: Janice Chan Enforcement Division, Air Section SDG: 17243B

Project Number: R17E01 75 Hawthorne Street Reported: 09/15/17 10:13

Project: Catalytic Converter Analysis FY2017 San Francisco CA, 94105

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
LWGGCML04HA003398	1708089-01	Solid	08/29/17 00:00	08/31/17 11:30



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Analyte	Reanalysis / Extract	Qualifiers / Result Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	1708089-01					Sol	id - Sampl	ed: 08/29/17 00:00
Sample ID:	LWGGCML04HA003398					XRF Ana	alvsis of Plat	inum Group Metals
Platinum		240	160	mg/kg	B17H152	09/12/17	09/13/17	XRF
Palladium		8,800	40	"	"	"	"	XRF
Rhodium		950	40	"	"	"	"	XRF

#### **Quality Control**

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit
Batch B17H152 General Biology - Platinum Group Metals by XRF	•				;	XRF Analysis			Analyzed: 09/13/17 als - Quality Contro
Blank (B17H152-BLK1)									
Platinum	ND	U	160 n	ng/kg					
Palladium	ND	U	40	"					
Rhodium	ND	U	40	"					
Blank (B17H152-BLK2)									
Platinum	ND	U	160 n	ng/kg					
Palladium	ND	U	40	"					
Rhodium	ND	U	40	"					
Reference (B17H152-SRM1)									
Platinum	730		n	ng/kg	697		105	85-115	
Palladium	280			"	326		86	85-115	
Rhodium	51			"	51.2		100	85-115	
Reference (B17H152-SRM2)									
Platinum	1,200		n	ng/kg	1130		103	85-115	
Palladium	230			"	233		98	85-115	
Rhodium	140			"	135		106	85-115	
Reference (B17H152-SRM3)									
Platinum	1,700		n	ng/kg	1780		98	85-115	
Palladium	280			"	279		101	85-115	
Rhodium	350			"	338		102	85-115	
Reference (B17H152-SRM4)									
Platinum	750		n	ng/kg	697		107	85-115	
Palladium	290			"	326		88	85-115	
Rhodium	53			"	51.2		104	85-115	
Reference (B17H152-SRM5)									
Platinum	1,200		n	ng/kg	1130		105	85-115	
Palladium	230			"	233		100	85-115	
Rhodium	140			"	135		105	85-115	
Reference (B17H152-SRM6)									
Platinum	1,700		n	ng/kg	1780		98	85-115	
Palladium	280			"	279		101	85-115	
Rhodium	360			"	338		106	85-115	



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#### **Qualifiers and Comments**

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

VIN Number	Engine Family	SAMPLE ID	Catalyst Type	Substrate Len.	Substrate Dia.	Substrate Vol.	Substrate Area	Cells	CPSI
				(cm)	(cm)	(cm³)	(in²)	#	
LWGGCML04HA003398	HHSNX.196GK1	1708089-01	Honeycomb	3.99	3.98	49.5	1.93	569	296

VIN Number	Engine Family	SAMPLE ID	Pt	Pd	Rh	Ratio	Active Material
			mg/Kg	mg/Kg	mg/Kg	Pt:Pd:Rh	Loading (g/ft3)*
LWGGCML04HA003398	HHSNX.196GK1	1708089-01	245	8779	946		41
						1:36:4	



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

(BP Cook

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

I, Janice Chan of USEVA hereby certify I
removed the following item;
VIN or ESN: <u>LWGGCMLØ+HA@@3398</u> The item is from Entry No.: <u>19R-@282141-1</u> Date Removed: <u>8/29/2017</u>
From a: 2017 Hisum Motor Corp KT196  Year Make Model
Allegedly covered by USEPA Engine Family: HHSNX, 1966K1  Engine Family  I further certify on 8/30/2017, I secured the described item prior to shipping it.

CHAIN OF CUSTODY							
Released By:	Date and Time	Received By:	Date and Time	Remarks			
Organization Cook	8-30-0/1015 Seal Intact? Y,N, Comment	Organization  USBPA	Seal Intact? Y,N, Comment				
Signature 4	į	Signature C					
Name Janice Chan Organization USEPA	8/35/17 14:50 Seal Intact? Y,N, Comment	Organization Arels	08 31 17 ~ 11:36  Seal Intact? Y,N, Comment				
Signature C		Signature					
Name		Name					
Organization	Seal Intact? Y,N, Comment	Organization	Seal Intact? Y,N, Comment				
Signature		Signature					
Name		Name					
Organization	Seal Intact? Y,N, Comment	Organization	Seal Intact? Y,N, Comment				
Signature		Signature					
Nanœ		Name					
Organization	Seal Intact? Y,N, Comment	Organization	Seal Intact? Y,N, Comment				
Signature		Signature					

Version: July 2015

Richmond, CA 94804

U.S. Environmental Protection Agency Region 9 Richmond Laboratory

Sample Receipt Checklist

Note in WO m	emo any items outside a	cceptable limits.	0
Project No: <u>RITEOI</u> Work Order No(s			Ja
CUSTODY SEALS Are Intact?Check if applies:   External Seals	□ Internal Seals	□ Yes □ No	XN/A- None
TEMPERATURE 22°C  Within Acceptable Range? (If preservation is "store Measured by: IR thermometer □ Provided Temp Blank was Check if applies: □ Sufficient ice present □ Insufficient/Melted Ice	☐ Probe thermometer inserters not used because ☐ Still cooling (sampled today)	ed in provided temp. blank	Ambient OK
SAMPLE CONTAINERS Are Intact?  Check if applies and identify sample IDs in col  Bottle/Jar/Vial broken  Other	mments:	□ Insufficient sample amount	
CHAIN OF CUSTODY  COC forms are present?  Check if applies: Not relinquished  TAT and analyses match TDF or scheduling  Check if applies: Preliminary Results  Samples are received within hold times?	□ Inconsistency resolved  Rush Request  Expires today	□ Follow-up needed (see con  ☐ Yes □ No ☐ 7-day TAT  ☐ Yes □ No	imentoj
PRESERVATION / FILTRATION Is Rec If yes, continue below. If no, mark N/A for the Samples were preserved and/or filtered in file If no, check if applies:   Analyst to filter and If yes, preservation and/or filtration are co	following: eld? //or preserve □ Sample Rece	□ Yes No □ Yes □ No □ Yes □ No siving to preserve (see page 2) □ Yes □ No	N/A
Metals: pH <2 □ HNO₃ Sulfide: Ferrous Iron: pH <2 □ HCI Cyanide: TOC/DOC: pH <2 □ H₂SO₄/H₃PO₄ (HCl is not allowed) Ammonia /NO3/NO2/TKN /Phosphorus: pH <2	pH >9 □ NaOH/Zinc acetate  pH >12 □ NaOH  for available instrumentation [i.e., problem	Cr6: pH >8.5 to	justed to 8.5-9.5)
FOLLOW-UP / COMMENTS / UNUSUA		OBSERVED (for example, sa	mple is pink):